

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-62 (Canceled)

63. (new) A method for providing enhanced services in a computer network, said method comprising:

receiving at a first network device a first message which includes client information;
receiving at the first network device a second message which includes server information;
comparing a first portion of the client information and a second portion of the server information; and
performing a first action based upon the comparison of the first portion of client information and second portion of server information.

64. (new) The method of claim 63 wherein the first portion of the client information includes application-level information.

65. (new) The method of claim 63 wherein the second portion of server information includes application-level information.

66. (new) The method of claim 63 further comprising:
determining that the first message includes a first request from a first client device for a first service; and
determining that the second message includes server advertisement information relating to at least one service provided by a first server;
comparing information relating to the first request and the server advertisement information.

67. (new) The method of claim 63 further comprising:
determining that the first message includes a first request from a first client device for a first service;

determining that the second message includes server advertisement information relating to at least one service provided by a first server; and

comparing information relating to the first request and the server advertisement information in order to determine whether a match may be identified.

68. (new) The method of claim 67:

wherein first request includes information indicating a desire to access a first service for a first desired price; and

wherein the server advertising information includes information indicating an ability to provide at least one service at at least one specified price.

69. (new) The method of claim 67:

wherein first request includes information indicating a desire to access a first service; and

wherein the server advertising information includes information indicating an ability to provide at least one service.

70. (new) The method of claim 67:

wherein first request includes information indicating a first degree of urgency in performing a first service; and

wherein the server advertising information includes information indicating at least one degree of expected delay in performing the first service.

71. (new) The method of claim 67:

wherein first request includes information indicating a first desired priority relating to a first service; and

wherein the server advertising information includes information indicating at least one degree of free capacity relating to at least one service;

72. (new) The method of claim 67:

wherein first request includes information indicating a first set of server requirements relating to a first service; and

wherein the server advertising information includes information indicating at least one set of server capabilities relating to at least one service;

73. (new) The method of claim 67:

wherein first request includes information indicating a desire to perform a first set of subtasks; and

wherein the server advertising information includes information indicating a capability of performing at least one set of subtasks.

74. (new) The method of claim 67:

wherein first request includes information indicating a desire to obtain a first set of products or services; and

wherein the server advertising information includes information indicating an ability to provide at least one set of products or services.

75. (new) The method of claim 63 further comprising:

determining that the first message includes a first request from a first client device for a first service;

determining that the second message includes server advertisement information relating to at least one service provided by a first server;

comparing information relating to the first request and the server advertisement information;

identifying a first match relating to the first request and the server advertisement information; and

generating at least one match message which includes information relating to the first match.

76. (new) The method of claim 75:

wherein the first message corresponds to a client message originating from a first client device;

wherein the second message corresponds to a server message originating from a first server device;

the method further comprising transmitting the at least one match message to the first client device.

77. (new) The method of claim 75:

wherein the first message corresponds to a client message originating from a first client device;

wherein the second message corresponds to a server message originating from a first server device;

the method further comprising transmitting the at least one match message to the first server device.

78. (new) The method of claim 63:

wherein the first message corresponds to a client message originating from a first client device; and

wherein the second message corresponds to a server message originating from a first server device.

79. (new) The method of claim 63 wherein the first network device is a router.

80. (new) A method for providing enhanced services in a computer network, said method comprising:

receiving at a first network device a first message which includes client information;

determining that the first message includes a first request from a first client device for a first service;

receiving at the first network device a second message which includes server information;

determining that the second message includes server advertisement information relating to at least one service provided by a first server;

comparing information relating to the first request and the server advertisement information in order to determine whether a match may be identified; and

performing a first action based upon the comparison of the first portion of client information and second portion of server information.

81. (new) The method of claim 80 wherein the first portion of the client information includes application-level information.

82. (new) The method of claim 80 wherein the second portion of server information includes application-level information.

83. (new) The method of claim 80 further comprising:
identifying a first match relating to the first request and the server advertisement information; and
generating at least one match message which includes information relating to the first match.

84. (new) The method of claim 80 wherein the first network device is a router.

85. (new) A router for providing enhanced services in a computer network, said router comprising:
at least one processor;
at least one interface configured or designed to provide a communication link to at least one other network device in the data network; and
memory;
the router being configured or designed to receive a first message which includes client information;
the router being configured or designed to receive a second message which includes server information;
the router being configured or designed to compare a first portion of the client information and a second portion of the server information; and
the router being configured or designed to perform a first action based upon the comparison of the first portion of client information and second portion of server information.

86. (new) The router of claim 85 wherein the first portion of the client information includes application-level information.

87. (new) The router of claim 85 wherein the second portion of server information includes application-level information.

88. (new) The router of claim 85 being further configured or designed to:
determine that the first message includes a first request from a first client device for a first service;
determine that the second message includes server advertisement information relating to at least one service provided by a first server; and

compare information relating to the first request and the server advertisement information.

89. (new) The router of claim 85 being further configured or designed to:
determine that the first message includes a first request from a first client device for a first service;
determine that the second message includes server advertisement information relating to at least one service provided by a first server; and
compare information relating to the first request and the server advertisement information in order to determine whether a match may be identified.

90. (new) The router of claim 89:
wherein first request includes information indicating a desire to access a first service for a first desired price; and
wherein the server advertising information includes information indicating an ability to provide at least one service at at least one specified price.

91. (new) The router of claim 89:
wherein first request includes information indicating a desire to access a first service; and
wherein the server advertising information includes information indicating an ability to provide at least one service.

92. (new) The router of claim 89:
wherein first request includes information indicating a first degree of urgency in performing a first service; and
wherein the server advertising information includes information indicating at least one degree of expected delay in performing the first service.

93. (new) The router of claim 89:
wherein first request includes information indicating a first desired priority relating to a first service; and
wherein the server advertising information includes information indicating at least one degree of free capacity relating to at least one service;

94. (new) The router of claim 89:

wherein first request includes information indicating a first set of server requirements relating to a first service; and

wherein the server advertising information includes information indicating at least one set of server capabilities relating to at least one service;

95. (new) The router of claim 89:

wherein first request includes information indicating a desire to perform a first set of subtasks; and

wherein the server advertising information includes information indicating a capability of performing at least one set of subtasks.

96. (new) The router of claim 89:

wherein first request includes information indicating a desire to obtain a first set of products or services; and

wherein the server advertising information includes information indicating an ability to provide at least one set of products or services.

97. (new) The router of claim 85 being further configured or designed to:

determine that the first message includes a first request from a first client device for a first service;

determine that the second message includes server advertisement information relating to at least one service provided by a first server;

compare information relating to the first request and the server advertisement information;

identify a first match relating to the first request and the server advertisement information; and

generate at least one match message which includes information relating to the first match.

98. (new) The router of claim 97:

wherein the first message corresponds to a client message originating from a first client device;

wherein the second message corresponds to a server message originating from a first server device;

the router being further configured or designed to transmit the at least one match message to the first client device.

99. (new) The router of claim 97:

wherein the first message corresponds to a client message originating from a first client device;

wherein the second message corresponds to a server message originating from a first server device;

the router being further configured or designed to transmit the at least one match message to the first server device.

100. (new) The router of claim 85:

wherein the first message corresponds to a client message originating from a first client device; and

wherein the second message corresponds to a server message originating from a first server device.

101. (new) A system for providing enhanced services in a computer network, said system comprising:

at least one processor;

at least one interface configured or designed to provide a communication link to at least one other network device in the data network; and

memory;

the system being configured or designed to receive a first message which includes client information;

the system being configured or designed to determine that the first message includes a first request from a first client device for a first service;

the system being configured or designed to receive a second message which includes server information;

the system being configured or designed to determine that the second message includes server advertisement information relating to at least one service provided by a first server;

the system being configured or designed to compare information relating to the first request and the server advertisement information in order to determine whether a match may be identified; and

the system being configured or designed to perform a first action based upon the comparison of the first portion of client information and second portion of server information.

102. (new) The system of claim 101 wherein the first portion of the client information includes application-level information.

103. (new) The system of claim 101 wherein the second portion of server information includes application-level information.

104. (new) The system of claim 101 being further configured or designed to:
identify a first match relating to the first request and the server advertisement information; and
generate at least one match message which includes information relating to the first match.

105. (new) The system of claim 101 wherein the system is a router.

106. (new) A computer program product for providing enhanced services in a computer network, said computer program product comprising:

a computer usable medium having computer readable code embodied therein, the computer readable code comprising:

computer code for receiving at a first network device a first message which includes client information;

computer code for receiving at the first network device a second message which includes server information;

computer code for comparing a first portion of the client information and a second portion of the server information; and

computer code for performing a first action based upon the comparison of the first portion of client information and second portion of server information.

107. (new) The computer program product of claim 106 wherein the first portion of the client information includes application-level information.

108. (new) The computer program product of claim 106 wherein the second portion of server information includes application-level information.

109. (new) The computer program product of claim 106 further comprising:
computer code for determining that the first message includes a first request from a first client device for a first service; and
computer code for determining that the second message includes server advertisement information relating to at least one service provided by a first server;
wherein said analyzing code includes computer code for comparing information relating to the first request and the server advertisement information.

110. (new) The computer program product of claim 106 further comprising:
computer code for determining that the first message includes a first request from a first client device for a first service;
computer code for determining that the second message includes server advertisement information relating to at least one service provided by a first server; and
computer code for comparing information relating to the first request and the server advertisement information in order to determine whether a match may be identified.

111. (new) The computer program product of claim 110:
wherein first request includes information indicating a desire to access a first service for a first desired price; and
wherein the server advertising information includes information indicating an ability to provide at least one service at at least one specified price.

112. (new) The computer program product of claim 110:
wherein first request includes information indicating a desire to access a first service; and
wherein the server advertising information includes information indicating an ability to provide at least one service.

113. (new) The computer program product of claim 110:

wherein first request includes information indicating a first degree of urgency in performing a first service; and

wherein the server advertising information includes information indicating at least one degree of expected delay in performing the first service.

114. (new) The computer program product of claim 110:

wherein first request includes information indicating a first desired priority relating to a first service; and

wherein the server advertising information includes information indicating at least one degree of free capacity relating to at least one service;

115. (new) The computer program product of claim 110:

wherein first request includes information indicating a first set of server requirements relating to a first service; and

wherein the server advertising information includes information indicating at least one set of server capabilities relating to at least one service;

116. (new) The computer program product of claim 110:

wherein first request includes information indicating a desire to perform a first set of subtasks; and

wherein the server advertising information includes information indicating a capability of performing at least one set of subtasks.

117. (new) The computer program product of claim 110:

wherein first request includes information indicating a desire to obtain a first set of products or services; and

wherein the server advertising information includes information indicating an ability to provide at least one set of products or services.

118. (new) The computer program product of claim 106 further comprising:

computer code for determining that the first message includes a first request from a first client device for a first service;

computer code for determining that the second message includes server advertisement information relating to at least one service provided by a first server;

computer code for comparing information relating to the first request and the server advertisement information;

computer code for identifying a first match relating to the first request and the server advertisement information; and

computer code for generating at least one match message which includes information relating to the first match.

119. (new) The computer program product of claim 118:

wherein the first message corresponds to a client message originating from a first client device;

wherein the second message corresponds to a server message originating from a first server device;

the computer program product further comprising computer code for transmitting the at least one match message to the first client device.

120. (new) The computer program product of claim 118:

wherein the first message corresponds to a client message originating from a first client device;

wherein the second message corresponds to a server message originating from a first server device;

the computer program product further comprising computer code for transmitting the at least one match message to the first server device.

121. (new) The computer program product of claim 106:

wherein the first message corresponds to a client message originating from a first client device; and

wherein the second message corresponds to a server message originating from a first server device.

122. (new) The computer program product of claim 106 wherein the first network device is a router.

123. (new) A router for providing enhanced services in a computer network, said router comprising:

means for receiving at a first network device a first message which includes client information;

means for receiving at the first network device a second message which includes server information;

means for comparing a first portion of the client information and a second portion of the server information; and

means for performing a first action based upon the comparison of the first portion of client information and second portion of server information.

124. (new) The router of claim 123 wherein the first portion of the client information includes application-level information.

125. (new) The router of claim 123 wherein the second portion of server information includes application-level information.

126. (new) The router of claim 123 further comprising:

means for determining that the first message includes a first request from a first client device for a first service; and

means for determining that the second message includes server advertisement information relating to at least one service provided by a first server;

wherein said analyzing code includes means for comparing information relating to the first request and the server advertisement information.

127. (new) The router of claim 123 further comprising:

means for determining that the first message includes a first request from a first client device for a first service;

means for determining that the second message includes server advertisement information relating to at least one service provided by a first server; and

means for comparing information relating to the first request and the server advertisement information in order to determine whether a match may be identified.

128. (new) The router of claim 123 further comprising:

means for determining that the first message includes a first request from a first client device for a first service;

means for determining that the second message includes server advertisement information relating to at least one service provided by a first server;

means for comparing information relating to the first request and the server advertisement information;

means for identifying a first match relating to the first request and the server advertisement information; and

means for generating at least one match message which includes information relating to the first match.

129. (new) The router of claim 123:

wherein the first message corresponds to a client message originating from a first client device; and

wherein the second message corresponds to a server message originating from a first server device.